CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION TENTATIVE

INVESTIGATIVE ORDER NO. R9-2009-0177

FOR HUBBS-SEA WORLD MARINE FISH HATCHERY LEON RAYMOND HUBBARD, JR., MARINE FISH HATCHERY AGUA HEDIONDA LAGOON SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region, (hereinafter Regional Water Board), finds that:

- 1. **Person Responsible for the Discharge**: Hubbs-Sea World Research Institute (hereinafter Discharger) is the owner and operator of the Leon Raymond Hubbard Jr. Marine Fish Hatchery (hereinafter Facility), a non-commercial fish hatchery and preserve that produces and releases native marine species.
- 2. Discharge of Waste: The Facility is a fish hatchery and preserve which breeds, rears, and releases white seabass and other native species for the replenishment of California's commercially and recreationally important fisheries. The Facility is located in an enclosed bay and estuary along the northern shore of outer Agua Hedionda Lagoon in the Los Monos hydrologic subarea (904.31) of the Agua Hedionda hydrologic area (904.3), of the Carlsbad hydrologic unit (904). The Facility withdraws up to 1.73 million gallons per day (MGD) of seawater from Agua Hedionda Lagoon at Intake Point 001 for the aquaculture operations. The withdrawn seawater passes through rapid sand filters for particulate removal, and then the filtered seawater is directed to either a flow through tank rearing system or to a ozone water treatment and water recirculation system.

Settled materials, including debris, fish waste, feed wastes, and other settled solids, are siphoned from the tank rearing systems and water recirculation system and discharged to the sanitary sewer system. Backwash from the rapid sand filters passes through a settling basin and bead filtration, where the solids are sent to the sanitary sewer system. The filtered backwash water, wastewater from the flow through tank rearing system, and the wastewater from the recirculation system is discharged back into Agua Hedionda Lagoon, a water of the United States, at Discharge Point 001 (outer basin of Agua Hedionda Lagoon; 33°, 08', 40" N latitude; 117°, 20', 39" W longitude).

The Facility falls below the aquatic animal production and feeding thresholds described in 40 Code of Federal Regulations (CFR) 122.24 and Appendix C of 40 CFR 122 for point sources. The Regional Water Board has also determined that the Facility is not a significant contributor of pollution to waters of the U.S. and does not warrant a case-by-case designation as a CAAP point source discharge pursuant to 40 CFR 122.24(c). Accordingly, the Hubbs-Sea World Research Institute Facility does not meet the definition of a CAAP facility, and is not required to obtain NPDES permit coverage.

- 3. Need for Monitoring Data: Although the discharge from the Facility does not require an NPDES permit, the Regional Water Board is required to regulate the Facility as a nonpoint source discharge, using the administrative permitting authorities provided in state law pursuant to the California Water Code. In light of the recent federal court rulings described above, the Regional Water Board will be taking steps in the future to regulate those aquatic animal facilities which are exempt from NPDES permit requirements, under waste discharge requirements (WDRs) or conditional waivers of WDRs. In the interim period, the Regional Water Board is requiring a monitoring and reporting program (MRP) to track the intake and effluent flow volumes and pollutant levels. The costs associated with providing the information required in this Investigative Order (Order) are reasonable for this discharge to track the amount of constituents in the influent (receiving waters) and effluent.
- 4. **Regulatory Authority and Necessity**: This Order is issued under authority of California Water Code (CWC) section 13267, and directs the Discharger to comply with the requirements contained in this Order.
- 5. California Environmental Quality Act: This action is for information gathering purposes and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et seq,) in accordance with Section 15306, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED, pursuant to section 13267 of the California Water Code, that the Discharger must comply with the following requirements:

I. General Monitoring Provisions

1. Samples and measurements collected as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board. Samples shall be collected at times representative of "worst case" conditions with respect to compliance with the requirements of this Order.

- Monitoring must be conducted according to USEPA test procedures approved at part 136 of 40 CFR, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act as amended, unless other test procedures are specified in this Order or separately by this Regional Water Board.
- All reports, or information submitted to the Regional Water Board shall be signed and certified as follow:
 - a. All reports required by this Order and other information requested by the Regional Water Board shall be signed as follows:
 - i. For a corporation by a principal executive officer of at least the level of vice-president;
 - ii. For a partnership or sole proprietorship by a general partner or the proprietor, respectively; and
 - iii. For a municipality, state, federal or other public agency by either a principal executive officer or ranking elected official.
 - iv. By a duly authorized representative of the person designated above (I.3.a.i, I.3.a.ii, or I.3.a.iii)
 - (a) The authorization is made in writing by a person described in paragraph 3.a above;
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - (c) The written authorization is submitted to the Regional Water Board.
 - b. Any person signing a document under this section shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- 4. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete any future NPDES/ WDR application for this Facility. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended by request of this Regional Water Board.
- 5. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
- 6. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or by a laboratory approved by this Regional Water Board.
- 7. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- Monitoring results shall be reported at intervals and in a manner specified in this Order and on discharge monitoring report forms accepted by the Regional Board.
- 10. This Order may be amended, rescinded, or updated by the Executive Officer for cause including, but not limited to, the following:
 - a. Violation of any terms or conditions of this Order;
 - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for amending, rescinding, or updating this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- 11. Anticipated Instances that may endanger health or the environment. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may endanger health or the environment.
- 12. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
- 13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

III. Standard Provision – Inspection and Entry

The Discharger shall allow the Regional Water Board and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to:

- 1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order:
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
- 3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order;
- 4. Sample or monitor, at reasonable times, as otherwise authorized by the CWA or the CWC, any substances or parameters at any location.

IV. Monitoring Locations

The Discharger shall establish the following monitoring locations to comply with this Order:

Table 1. Monitoring Station Locations

Intake/Discharge Point Name	Monitoring Location Name	Monitoring Location Description		
		- Influent (Receiving Water) Monitoring Station -		
Intake Point 001	INF-001	At a location where representative undiluted and unaltered samples of intake seawater from Agua Hedionda Lagoon can be collected prior to being in contact with intake pump units.		
		- Effluent Monitoring Station -		
Discharge Point 001	EFF-001	At a location where representative undiluted and unaltered samples of the discharge from the Facility can be collected prior to being discharged into Agua Hedionda Lagoon.		

IV. Influent Monitoring Requirements

1. The Discharger shall monitor the influent (receiving water of the Agua Hedionda Lagoon) at monitoring location INF-001 as follows:

Table 2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency			
рН	standard units	Grab				
Temperature	°C	Grab				
Total suspended solids	mg/L	Grab				
Settleable solids	mL/L	Grab				
Total nitrogen (as N)	mg/L	Grab	See V.1., Table 3, below			
Total phosphorus (as P)	mg/L	Grab				
Total copper	µg/L	Grab				
Total zinc	μg/L	Grab	·			
Ammonia, un-ionized	mg/L	Grab	•			

2. Influent monitoring shall be conducted on the same day and during the same time period as the effluent monitoring for the same parameters. If the effluent monitoring frequency for the parameters listed in Table 3 is increased, the influent monitoring in Table 2 shall also be increased to the same frequency.

V. Effluent Monitoring Requirements

1. The Discharger shall monitor the discharge from the Facility at EFF-001 as follows:

Table 3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency			
Flowrate	MGD	Continuous	Daily			
pH	standard units	Grab	Monthly			
Temperature	°C	Grab	Monthly			
Total suspended solids	mg/L	24-hr composite	Monthly			
Settleable solids	·mL/L	Grab	Monthly			
Total nitrogen (as N)	mg/L	24-hr composite	Monthly			
Total phosphorus (as P)	mg/L	24-hr composite	Monthly			
Total copper	μg/L	24-hr composite	Quarterly (January, April, July, October)			
Total zinc	μg/L	24-hr composite	Quarterly (January, April, July, October)			
Ammonia, un-ionized (as N)	mg/L	24-hr composite	Quarterly (January, April, July, October)			
CTR priority pollutants (inorganics) except copper and zinc	µg/L	24-hr composite	Once every five years			
CTR priority pollutants (organics)	μg/L	Grab .	Once every five years			

2. Discharge at Settling Basin (Backwash Water from the Rapid Sand Filters)
Total suspended solids is sampled weekly at the discharge from the settling
basin (this is the backwash water from the rapid sand filters), and prior to
entering settling basin.

Table 4. Monitoring of Discharge from Settling Basin

Parameter	Units	Sample Type	Minimum Sampling Frequency	
Total suspended solids (prior to entering the settling basin)	mg/L	Grab	Monthly	
Total suspended solids (discharged from the settling basin)	mg/L	Grab	Monthly	

VI. Receiving Water Monitoring Requirements - Surface Water

The influent monitoring program under this Order section IV also constitutes the receiving water monitoring program. There are no separate receiving water monitoring requirements.

VII. Other Monitoring Requirements

- 1. With each monitoring report, the discharger shall submit the following information regarding contagious diseases, or the use of drugs, disinfectants, and other chemicals that may be present in discharges to surface waters:
 - a. Aquaria failure or significant mortalities at the facility caused by contagious diseases that could be discharged and infect aquatic life in the Agua Hedionda Lagoon.
 - b. Chemical names of all drugs, disinfectants, and other chemicals, used at the facility, during the reporting period, that could be discharged into Agua Hedionda Lagoon. Include the amounts and dates of application of drugs, disinfectants, and other chemicals. For drugs, disinfectants, and other chemicals used on a routine basis, the frequency of application may be reported instead of each date of application.
 - c. Flow (in cfs) during chemical usage at the point of discharge to the receiving waters.
- 2. The following information shall be available upon request by the Regional Water Board.

Chemical names, active ingredients, label instructions and restrictions, Material Safety Data Sheets, and amounts of all drugs, disinfectants, and other chemicals used or available for use at the facility.

VIII. Reporting Requirements - Self Monitoring Reports

At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

- 2. The Discharger shall report in the SMR the results for all monitoring specified in this Order under sections IV through VII. The Discharger shall submit annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
- 3. The Discharger shall continue influent, effluent, and settling basin monitoring as required within Monitoring and Reporting Program (MRP) No. 2001-237 and shall submit the 2009 Annual Monitoring Report, according to the requirements in MRP No. 2001-237, by February 1, 2010.
- 4. Monitoring periods and reporting for all required monitoring pursuant to this Investigative Order shall be completed according to the following schedule, with the first annual report due January 30, 2011:

Table 5 - Reporting Schedule

Report Due		
ry 30th		
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- 5. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in part 136 of 40 CFR. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
 - c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- d. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- e. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 6. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify any monitoring violations of this Order; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the monitoring requirement that was violated and a description of the monitoring violation.
 - c. The Discharger shall report in its cover letter all instances that may endanger health or the environment. The reports shall contain the following information: a description of the instance and its cause; the period of the instance, including exact dates and times, and if the instance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the instance.
 - d. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4340

Order by:

DAVID W. GIBSON

Executive Officer

Date of Issuance: 14 Dec. 2009

SENDER: COMPLETE THIS SECT	ION	COMPLETE THIS SECTION ON DELIVERY				
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